**Example of a Hospital-Based Specialty Chronic Health Home Model**

**Submitted to: The Chronic Health Home Work Group of Maryland's Overarching Work Group on Behavioral Health Integration**

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## A. Introduction:

When Maryland added a limited outpatient substance abuse treatment benefit to the Primary Adult Care (PAC) program in 2010, it did not extend to services provided in HSCRC-regulated treatment programs. The attention this exclusion garnered and the expectations of health care reform and behavioral health integration spurred efforts in Baltimore City to consider a redefined role for hospital-based substance abuse treatment services. To that end, in the fall of 2011, the Baltimore Substance Abuse Systems, Inc. (BSAS) convened a workgroup consisting of key leaders from the three HSCRC-regulated outpatient substance abuse treatment programs, community-based treatment providers, and others have joined as well. This workgroup has met regularly, often weekly or every other week, since September, 2011, to define a target population and a model of care anchored in the unique resource environment of a hospital system. This document summarizes our ethos, and offers a brief description of our work to date. We hope that it may inform the current Behavioral Health Integration effort that is occurring at the state-level, especially as that effort considers the importance of medical homes as an organizing construct.

## B. The workgroup members include:

Dr. Kenneth Stoller, Director, Johns Hopkins Hospital Broadway Center for Addiction, Assistant Professor, Johns Hopkins University, Department of Psychiatry and Behavioral Sciences

Dr. Anika Alvanzo Medical Director, Johns Hopkins Hospital Broadway Center for Addiction, Assistant Professor of Medicine, Johns Hopkins School of Medicine, Department of Medicine - General Internal Medicine

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Dr. Van King, Medical Director, Addiction Treatment Services and Center for Addiction and Pregnancy, Johns Hopkins Bayview Medical Center, Associate Professor, Psychiatry and Behavioral Sciences

Jim Graham, Administrative Director, Addiction Treatment Services and Center for Addiction and Pregnancy, Johns Hopkins Bayview Medical Center

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Dr. John Chapman Urbaitis, Medical Director, SHARP, Sinai Hospital of Baltimore

Karen Reese, MA, CAC-AD, Executive Director, Man Alive, Inc., Lane Treatment Center

Jeff Galecki, MS, Quality Assurance Director, Man Alive, Inc., Lane Treatment Center

Dr. Yngvild Olsen, Consultant to Baltimore Substance Abuse Systems, Inc., Medical Director, Institutes for Behavior Resources, Inc./REACH Health Services

Greg Warren, MA, MBA, President/CEO, Baltimore Substance Abuse Systems, Inc.

Christina Trenton, LCSW-C, CAC-AD, Chief Operating Officer, Baltimore Substance Abuse Systems, Inc.

Dr. Jose Arbelaez, Director of Epidemiology and Evaluation, Baltimore Substance Abuse Systems, Inc.

Ryan Smith, MSW, Special Projects Coordinator, Baltimore Substance Abuse Systems, Inc.

Marla Oros, RN, MS, President, Mosaic Group

Dr. Peter Cohen, Medical Director, Alcohol and Drug Abuse Administration

Michael Abrams, MPH, Senior Research Analyst, Hilltop Institute, consultant to DHMH and Baltimore Substance Abuse Systems, Inc.

Crista Taylor, LCSW-C, Director, Adult Services Division, Baltimore Mental Health Systems, Inc

**C. Background:**

The workgroup convened with a common understanding and experience that for some people with substance use disorders, appropriate treatment is complicated by frequent, and often severe co-morbidities. Community-based treatment programs, lacking the necessary and adequately-trained staff and resources to meet all the needs of this population, often experience significant challenges in effectively treating these patients.

The workgroup conceptualized hospital-based substance abuse treatment programs as representing an as-yet unrealized resource for the most complicated individuals with substance use disorders. Hospital-based programs can tap into a wider array of primary and specialty type healthcare services than community-based programs, can take advantage of more robust electronic medical record systems, and often operate in environments of academic learning, study, and innovation.

In defining the target population, the workgroup identified and reviewed individual hospital and community-provider data, as well as multivariate analyses conducted by Michael Abrams at the Hilltop Institute. Using a Latent Class Analysis (LCA) methodology, the analyses used 70 parameters (e.g., demographics, diagnoses, service utilization) to identify several unifying characteristics of Medicaid enrollees in calendar 2010 with substance use and other medical and psychiatric disorders that might uniquely benefit from treatment in a hospital-based setting.

### D. Target Population:

Four categories from the Hilltop Institute's LCA analyses stood out as having multiple, simultaneous conditions and Medicaid expenditures significantly above the median: 1) adults with high somatic morbidity; 2) adults with high psychological morbidity; 3) adults with substance use disorders and dual enrollment in Medicaid and Medicare; and 4) disabled adults primarily with opioid dependence and receiving medication-assisted treatment. These categories informed the development of a set of medical necessity and continued stay criteria for a specialized, hospital-based chronic health home model (see attached). These criteria incorporate elements of known and well established tools, including Maryland's medical necessity criteria for Assertive Community Treatment and the Charlson Comorbidity Index. The latter was chosen for its previous use to predict mortality risk, including among patients on methadone maintenance. In addition, several areas of medicine have applied this index in predicting healthcare utilization and cost, including among patients with COPD, Alzheimer's, depression, and diabetes.

### E. Service Delivery Model:

The service delivery model, designed to meet an individual's comprehensive needs and retain the person in care for as long as he/she meets criteria, builds on existing staffing and resources in hospital-based substance abuse treatment programs. The core components include comprehensive assessment and evaluation services, pharmacological therapies for a range of substance use disorders, evidence-based behavioral interventions that incorporate trauma-informed approaches, co-management of medical conditions, intensive care management and coordination of care services, and outreach and peer support. In addition, cross-training of higher level, licensed multi-disciplinary professionals in areas such as effective teamwork, basic medical and psychiatric issues, and chronic disease management ensures the development and implementation of coordinated, collaborative care across a hospital network of specialty providers and settings. In essence, for patients with complex medical and/or psychiatric disorders in addition to substance use disorders, this service delivery model may become their chronic health home.

### F. Points of Importance

In developing this specialty behavioral health model, the workgroup has considered several implications.

For a specialty chronic health model such as this to be successful, it seems likely that special elevated case management rates will be necessary to cover some additional infrastructure costs. The promise of downstream savings the for this complex population that often relapses to the emergency room and inpatient hospital wards appears to justify elevated rates. Clearly, though, this specialty model will need to demonstrate associated health benefits and cost-savings if the effort is to be sustained.

The workgroup also understands that this is one example of potentially several models that can be considered for this complex population. While this model may appear to compete with others (e.g., primary care focused medical homes, community-provider chronic health homes), it likely will instead complement such efforts by targeting a uniquely challenging population of persons with high-morbidity substance use disorders.